

**Written Statement of Thomas Tidwell
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**Hearing on HR 5598, The Boundary Waters Wilderness Protection and Pollution
Prevention Act**

**Before the Subcommittee on Energy and Mineral Resources
Natural Resources Committee
U.S. House of Representatives**

February 5, 2020

Chairman Lowenthal, Ranking Member Gosar, and Members of the Committee,

I join you today to express my strong support for Representative McCollum's bill, HR 5598, the Boundary Waters Wilderness Protection and Pollution Prevention Act. My support for this legislation is informed by my direct experience with this issue during my time as the Chief of the Forest Service from 2009 to 2017, spanning the Obama Administration and the first eight months of the Trump Administration.

Permanent protection for the headwaters of the Boundary Waters Canoe Area Wilderness (Boundary Waters) is the right thing to do for both present and future generations and is in line with the science and decades of established law.

In December 2016, as Chief of the Forest Service, I exercised my legal authority to withhold consent to the renewal of hardrock mineral leases within the lands encompassed by HR 5598. My 2016 written decision describes in detail the reasons why sulfide-ore copper mining in the Boundary Waters watershed is incredibly risky and incompatible with the Wilderness Act and the 1978 Boundary Waters Wilderness Act and with the Forest Service's obligations to protect the Boundary Waters' unparalleled and irreplaceable wilderness values. My decision, attached to my written statement to this Committee, was based on an exhaustive review of the scientific record and engagement with the public.

Since 2016, the scientific record has only grown stronger. At least two dozen new scientific reports document the likelihood of harm if sulfide-ore copper mining were allowed on Superior National Forest lands in the watershed of the Boundary Waters. Attached with my testimony is a summary and collection of the relevant science, including additional scientific, economic, and human health reports developed since December 2016.

My decision to deny the renewal of the leases, I was based on the inherent risk of sulfide-ore copper mining and the high potential for release of mine pollution, including but not limited to

acid mine drainage, into the water rich environment of the Boundary Waters watershed. A review of water quality impacts from 14 operating U.S. sulfide-ore copper mines found that 100% of the mines experienced pipeline spills or accidental releases and 13 out of 14 mines experienced failures to control contaminated mine seepage, leading to harmful water quality impacts. These risks are only further exacerbated in the wet environment and uniquely interconnected hydrogeology of the Superior National Forest and Boundary Waters.

Others share my concerns about what the science tells us is likely to happen to the Boundary Waters if sulfide-ore copper mining is allowed in the watershed. Brenda Halter is present today. As the former Superior National Forest Supervisor, Brenda's local experience and scientific expertise make her one of the most knowledgeable people on the likely impacts of sulfide-ore copper mining on the Boundary Waters. Brenda was recently joined by an impressive group of retired Forest Service scientists and previous Superior National Forest land managers in signing a joint letter attesting to the environmental risk of siting a sulfide-ore copper mine in the Boundary Waters watershed. These colleagues represent nearly 1,000 years of professional expertise AND direct experience working with Boundary Waters. They provide a unique and valuable perspective that should not be overlooked.

Unfortunately, the Administration has reinstated and renewed the leases that I determined posed an unacceptable risk to the Boundary Waters. It also abruptly terminated a scientific study by Forest Service scientists and resource experts of a proposed administrative mineral withdrawal. While claiming that their findings in the cancelled study justified the decision to cancel the proposed withdrawal, the Administration has refused to disclose the findings or any of the purported evidence with either Congress or the public. If this review had truly suggested that sulfide-ore copper mining does not threaten the Boundary Waters, then the Administration would have simply completed and published the study.

The Boundary Waters is both ecologically and culturally irreplaceable. The very characteristics that make it so valuable also make it extremely susceptible to degradation and impossible to remediate should pollution occur. Sound natural resource management means allowing acceptable uses in places where risks can be minimized, monitoring can be effective, and remediation can be quick and complete. NONE of these criteria can be met by sulfide-ore copper mining on National Forest lands in the watershed of the Boundary Waters.

I stand by my decision that sulfide-ore copper mining in the watershed of the Boundary Waters is unacceptable. The risks are high. The rewards are low. And our ability to fix anything when it goes wrong is non-existent without compromising the very wilderness characteristics that we are legally and ethically required to protect. I urge the committee to support this bill and ask that the House and Senate move swiftly to enact it into law.

Scientific Evidence Supporting Withdrawal

Much of the scientific evidence documenting the irreplaceable values of the Boundary Waters as well as the risks posed by sulfide-ore copper mining in the watershed of the Boundary Waters are detailed in my decision letter from December 14, 2016 included as Attachment 1. The letter includes a 7-page bibliography of the scientific basis for my decision. Those cited materials and additional post-2016 scientific reports can be found at www.Earthworks.org/BoundaryWaters/ and I incorporate them by reference.

The most visited Wilderness Area in the country, the Boundary Waters is the only large-scale protected sub-boreal forest in the lower 48 United States. The Superior National Forest, which includes the Boundary Waters, represents 1.6% of the National Forest System's total acreage, yet it holds 20 percent of the fresh water in the National Forest System. In addition to the existing high quality of the waters, the dramatic hydrogeology and interconnectedness of the Boundary Waters watershed's forests, lakes, streams, and wetlands make the region unique and highly susceptible to degradation. Scientific studies of the hydrogeology of the Boundary Waters show that contaminants released within the watershed will spread quickly into surface waters that flow through the Boundary Waters, Voyageurs National Park, and Quetico Provincial Park. Even if it were possible to capture and contain acid mine drainage before it travels deep into the Boundary Waters, common remediation techniques such as water diversions, water treatment plants, and containment basins, as well as the roads and infrastructure needed to construct and operate them for decades are incompatible with Wilderness, and inconceivable in this freshwater-rich landscape.

The Boundary Waters, while perhaps best known for its incredibly fishery, also holds abundant and diverse habitat for a wide array of wildlife species including three threatened or endangered species: Canada Lynx, northern long-eared bat, and gray wolf. Especially in the face of climate change, the Boundary Waters may be critical to the continued existence of these and other species in Minnesota.

The science regarding the ecological, recreational, and economic values of the Boundary Waters is clear, as is the science regarding the threats posed to these values by sulfide-ore copper mining. Acid mine drainage (AMD) generally occurs when sulfide minerals present in ore bodies and rock overburden are exposed to air and water. AMD includes sulfuric acid, which decreases water pH, and leaches sulfate and harmful heavy metals such as arsenic, cadmium, and lead into groundwater, lakes, wetlands, and rivers. Hardrock mines in sulfide-bearing ore bodies like those that underlay the lands in question are known worldwide for producing AMD.

The bedrock geochemistry in northeastern Minnesota makes the surface waters of this area, including those in the Boundary Waters, particularly sensitive to acid deposition and acid runoff. This is due to the lack of carbonate bedrock to provide buffering capacity – meaning in plain terms that the waters of the Boundary Waters, while incredibly pure, are also poorly equipped to handle an influx of AMD. The resulting decline in the pH of the water is extremely harmful to the aquatic ecosystem and food chain.

Mining would inevitably – indeed by definition – result in ore bodies being exposed to air and water. Given their composition, resulting drainage will be acidic. Further, all water draining from a sulfide-ore copper mine in the watershed would carry heavy metals pollution, sulfate, and other contaminants into the Boundary Waters and federally-protected waters around it.

This scientific record is why a group of retired Forest Service scientists and former Superior National Forest resource managers and specialists representing nearly 1,000 years of combined scientific expertise signed a joint letter attesting to the environmental risk of siting a sulfide-ore copper mine in the Boundary Waters watershed. This letter is included with my testimony as Attachment 2.

Administrative Actions to Date

During the period leading up to my December 14, 2016 decision to withhold consent to renewal of the leases, the Forest Service conducted a thorough scientific review, provided a 30-day comment period, and held two public meetings and numerous meetings with stakeholders, elected officials, and others. In contrast, the process to reverse my decision and begin fast-tracking mining approvals has involved a complete lack of transparency and public input. Included as Attachment 3 with my testimony is a timeline of key Administrative and legal actions regarding the Boundary Waters to date.

In particular, I'd like to focus your attention on the consideration of the Forest Service's application for a 20-year mineral withdrawal for the lands encompassed in HR 5598, which was initiated in January 2017. The Forest Service based the request for withdrawal and a subsequent environmental study on the already documented scientific concerns with the impacts of sulfide-ore copper mining on the Boundary Waters. Over the course of the review, the Forest Service received more than 180,000 public comments, of which 98% support withdrawal. Additional science that was made publicly available underscored and deepened previous concerns. Yet, in September 2018 the Secretary of Agriculture, Sonny Perdue, announced the termination of the study and cancellation of the withdrawal request. This announcement was made 20 months into a 24-month study. The Department of Agriculture has thus far failed to share the results of this taxpayer-funded effort with the public or Congress. Moreover, while the Secretary of Agriculture asserted that the study had uncovered no new scientific evidence, in fact new scientific reports were submitted during the study. Even if there had been no new science uncovered during the first 20 months of study, that would have substantiated – not undercut – the conclusion in my December 14, 2016 decision letter that sulfide-ore copper mining in the Boundary Waters watershed is fundamentally incompatible with the Forest Service's responsibility and legal obligations.

Legal Basis for Boundary Waters Protection

The decisions made during my tenure as Forest Service Chief were entirely in line with the legal framework requiring our decisions to be made in the best interests of the public and to ensure protection of the unique resources of the Boundary Waters.

The Superior National Forest falls under a unique legal regime for hardrock mining that is designed to protect the outstanding recreational values of the National Forest and the Boundary Waters. Under a 1950 statute, mineral leasing and development can only occur with the consent of the Forest Service, which in turn is obligated under the 1978 Boundary Waters Canoe Area Wilderness Act to protect wilderness values and to protect the water quality of the Boundary Waters and a Mining Protection Area within the Superior National Forest from mining impacts to the maximum extent possible. These laws and the Forest Service's obligations under them informed my 2016 decision to withhold consent to renewal of hardrock mineral leases that the science showed would create an unacceptable risk to the Boundary Waters.

Mining advocates have advanced a distorted interpretation of these laws – claiming that the 1978 Boundary Waters Act in particular somehow implicitly authorized mining outside the Boundary Waters and the Mining Protection Area. To the contrary, the Act requires protection of the Boundary Waters and the Mining Protection Area from mining located elsewhere on the Superior National Forest and is congruent with, and paves the way, for the additional protections included in HR 5598.

Nor does the 2004 Superior National Forest Plan mandate mining. The Plan did not contemplate, analyze, or anticipate sulfide-ore copper mining, and mining was identified as one of the “issues not addressed in detail” in the process. At the time of the 2004 Forest Plan revision no one was actively pursuing copper mining on the Superior National Forest. Forest plans do not mandate activities. The Superior National Forest Plan does, however, provide direction for protecting the Boundary Waters and recreational and ecological values on the Superior National Forest, all of which would be threatened by sulfide-ore copper mining.

I believe that passage of HR 5598 is essential. It would be another important chapter in the bipartisan history of working to ensure permanent protection for this irreplaceable national resource, the Boundary Waters Canoe Area Wilderness.